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EXAMINER	
KASZTEJNA, MATTHEW JOHN	
ART UNIT	PAPER NUMBER
3739	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/800,567	IRION, KLAUS M.	
	Examiner	Art Unit	
	Matthew J. Kasztejna	3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *22 May 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,16-29 and 31-34* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,16-29 and 31-34* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *15 March 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Notice of Amendment

In response to the amendment filed on May 22, 2007, amended claims 1 and 31-33 are acknowledged. The following new and reiterated grounds of rejection are set forth:

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 3-5, 7-8, 10-14, 16-18, 21, 24-25 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,681,260 to Ueda et al.

In regards to claim 1, Ueda et al. disclose an intracorporeal probe for at least one of examination and therapy of body cavities in the human or animal body, the probe being in the form of a capsule 150 which can be introduced into the body without external connection elements, and the probe having at least one light-emitting element 154 and at least one light-receiving element 152, wherein the at least one light-receiving element receives light in another wavelength range than that in which the at least one light-emitting element emits light wherein the capsule contains a position-detecting element 159 whose position can be determined from outside the body an which is capable to detect a position and an orientation of the probe with respect to axes of the probe relative to the body cavity (see Col. 18, Lines 9-67).

In regards to claims 3-5, Ueda et al. disclose an intracorporeal probe, wherein the at least one light-emitting element is a light-emitting diode 154 and wherein the at least one light-emitting element has an emission characteristic covering the entire solid angle (see Fig. 27).

In regards to claims 7-8, Ueda et al. disclose an intracorporeal probe, wherein the at least one light-receiving element is designed in such a way that it receives light from the entire solid angle range and wherein a plurality of light-receiving elements are arranged in the capsule in such a way that light can be received from the entire solid angle range (see Fig. 27).

In regards to claim 10, Ueda et al. disclose an intracorporeal probe, wherein the capsule contains at least one further light-receiving element 153 in the form of an image sensor for the purpose of receiving a visual image (see Col. 18, Lines 9-67).

In regards to claim 11, Ueda et al. disclose an intracorporeal probe, wherein the capsule contains at least one further light-emitting element which emits white light (see Fig. 27).

In regards to claim 12, Ueda et al. disclose an intracorporeal probe, wherein the capsule contains a transmitter element 161 and 157 for the purpose of emitting signals from the probe to outside the body (see Fig. 27-28).

In regards to claim 13, Ueda et al. disclose an intracorporeal probe, wherein the capsule contains a signal-preprocessing element 156 and 157 which forwards an opto-electrical signal originating from the at least one light-receiving element to the transmitter element (see Fig. 27-28).

In regards to claim 14, Ueda et al. disclose an intracorporeal probe, wherein the capsule contains a signal storage element 156 for the purpose of storing signals of the at least one light-receiving element (see Col. 18, Lines 28-40).

In regards to claims 16-17, Ueda et al. disclose an intracorporeal probe, wherein the position-detecting element is designed as a coil system whose position can be detected via an external magnetic field detector and wherein the capsule contains a positioning element which can be controlled from outside the body in order to position the probe (see Col. 18, Line 43 - Col. 19, Line 18).

In regards to claim 18, Ueda et al. disclose an intracorporeal probe, wherein the capsule contains at least one of an energy supply unit and an element for receiving electromagnetic energy irradiated from outside the body (see Col. 18, Line 43 - Col. 19, Line 18).

In regards to claim 21, Ueda et al. disclose an intracorporeal probe wherein, the capsule contains a reservoir for at least one of therapeutic substances and diagnostic substances which are dispensed inside the body by the probe (see Col. 18, Lines 59-60).

In regards to claim 24, Ueda et al. disclose an intracorporeal probe wherein, wherein the probe is designed as an implant and has a capsule wall formed with long-term biocompatible and sterilizable material (see Fig. 27).

In regards to claims 25 and 32, Ueda et al. disclose an intracorporeal probe wherein the probe has a fully enclosing transparent capsule wall (see Fig. 27).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1-14, 17-18, 23-29 and 33-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,240,312 to Alfano et al. in view of U.S. Patent No. 5,681,260 to Ueda et al.

In regard to claims 1-8, 10, 12-14, 24, 25 and 30, Alfano et al. teach a device 11 including a transport capsule 13 made of a smooth and non-corrosive material, such as Teflon, stainless steel, silicon or gold, which are biocompatible, where the capsule 13 houses a spectroscopic system 14, a motion mechanism 15, a surgical system 17, a laser system 19, a communications system 21, a light source 23, an imaging system 25 and a power system 27, all of which are coupled to a microcomputer and controller 29 (see Figure 1 and col. 4, lines 25-50). The imaging system preferably comprises a micro-video CCD and LED light sources that are preferably three color LED diodes, where the three colors LED diodes (red, green and blue as is conventional) would emit light in a shorter wavelength than the light received by the imaging system 25 (see col. 6, lines 12-17). Figures 2 and 3 show that, as broadly as claimed, the light emitted by the LED diodes and the light received by the imaging system 25 covers the entire solid angle seen by the capsule 13. Furthermore, Alfano discloses that a metal sensor may be controlled via an external magnet as a means for a motion control of the capsule, but is silent with respect to the specifics of the position-detecting element (i.e. the metal

sensor (see Col. 5, Lines 15-21). Ueda et al. teach of an analogous capsule endoscope wherein a magnetic field is generated from the magnetic force generating part 31, a magnetic force is generated between this magnetic force generating part 31 and the guided part of the capsule type endoscope 150, the magnetic force generating part 31 is moved and the capsule type endoscope 150 is guided. By detecting the position of the guided part 159 with the hall sensor 131, the position of the capsule type endoscope 150 is detected (see Col. 18, Lines 9-67). It would have been obvious to one skilled in the art at the time the invention was made to include a position detecting element in the apparatus of Alfano et al. to provide a guiding apparatus and method for magnetically guiding an insertable body within an inspected object wherein the guidance controllability in the case of guiding is high as taught by Ueda et al. (see Col. 2, Line 59 – Col. 3, Line 45).

In regard to claim 9, Alfano et al. teach the use of filters on the imaging and illumination system of the capsule 13 (see col. 6, lines 21-34). **In regard to claim 11**, Alfano et al. teach the use of micro flash lamps for illumination, which would emit white light (see col. 6, lines 17-21). **In regard to claim 23**, Alfano et al. teach an alternate embodiment where the device 153 is connected to an external computer system C via a wire cable that delivers operation commands and electrical power (see Figure 11b and col. 7, lines 15-30). **In regard to claims 26-29 and 33-34**, Alfano et al. teach the use if a semiconductor diode laser system as a surgical source to ablate tissue or weld tissues together (see col. 6, lines 50-65).

Claims 19-20, 22 and 31 are rejected under 35 U.S.C. 103(a) as being anticipated by U.S. Patent No. 5,681,260 to Ueda et al. in view of U.S. Patent No. 6,668,185 to Toida.

In regards to claims 19-20, 22 and 31, Ueda et al. disclose an intracorporeal probe for at least one of examination and therapy of body cavities in the human or animal body, the probe being in the form of a capsule 150 which can be introduced into the body without external connection elements, and the probe having at least one light-emitting element 154 and at least one light-receiving element 152, wherein the at least one light-receiving element receives light in another wavelength range than that in which the at least one light-emitting element emits light wherein the capsule contains a position-detecting element 159 whose position can be determined from outside the body an which is capable to detect a position and an orientation of the probe with respect to axes of the probe relative to the body cavity (see Col. 18, Lines 9-67). Ueda et al. are silent with respect to at least one at luminescent substance which can be excited by excitation from outside the body and emits light through a capsule wall and wherein an ultrasound transmitter/receiver element for ultrasound imaging is arranged in the probe. Toida teaches of an analogous endoscopic device provided with an SLD (Super Luminescent Diode) 101 for emitting a low-coherence light L1, and a lens 102 for focusing the low-coherence light L1 emitted from the SLD 101. Toida also teaches of using ultrasound to obtain an ultrasound tomographic image of a desired area (see Fig. 6). It would have been obvious to one skilled in the art at the time the invention was

made to include a luminescent substance in the apparatus of Ueda et al. to provide an alternate means of illumination having a low-coherence as taught by Toida.

Response to Arguments

Applicant's arguments filed May 22, 2007 have been fully considered but they are not persuasive.

Applicant states that Ueda et al. are completely silent about determining the orientation of the capsule type endoscope relative to the body cavity. Examiner disagrees. Ueda et al. teach of a capsule endoscope wherein a magnetic field is generated from the magnetic force generating part 31, a magnetic force is generated between this magnetic force generating part 31 and the guided part of the capsule type endoscope 150, the magnetic force generating part 31 is moved and the capsule type endoscope 150 is guided. By detecting the position of the guided part 159 with the hall sensor 131, the position of the capsule type endoscope 150 is detected (see Col. 18, Lines 9-67). Since the magnetic force generating part 31 is used to guide the guiding part 159, the orientation of the capsule would be known due to the magnetic field created (North and South poles) used to lead the capsule 150 through the body lumen. Furthermore, positioning and orientating endoscopic devices within the body via magnetic forces are well known within the art as demonstrated by applicant's own specification (see paragraphs 0035-0038 and 0086-0087). Applicant fails to show a position-detecting element and merely states positioning of the capsule may be done, for example, from outside the body by the action of a magnetic field. Ueda et al. disclose an apparatus wherein the capsule contains a positioning element which can be

controlled from outside the body for the purpose of positioning the probe. Thus, as broadly as claimed, Ueda et al. meet the limitations of the claims.

Applicant states that Alfano is completely silent with respect to detecting the position of the device. Examiner disagrees. Alfano teaches that various types of motion mechanisms which may be usable in the remote-controllable, micro-scale device of FIG. 1 including electromagnetic systems, such as a metal sensor in the device controlled by an external magnet (see Col. 5, Lines 15-21). Ueda et al. disclose an electromagnetic system as such in further detail as stated previously.

Furthermore, the word " "capable of" in the claims does not require that reference actually teach the intended use of the element, but merely that the reference does not make it so it is incapable of performing the intended use.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew J. Kasztejna whose telephone number is (571) 272-6086. The examiner can normally be reached on Mon-Fri, 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MJK

8/2/7

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